Competing interests: HB and DE have in the past received funding from vaccine manufacturers Wyeth, Aventis Pasteur MSD, GlaxoSmithKline to attend symposiums and conduct research.

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Women in medicine

Continuing unequal status of women may reduce the influence of the profession

In a recent interview with the *Independent* newspaper, Professor Carol Black, president of the Royal College of Physicians, expressed concern that the increasing number of women within medicine might lead to the profession losing influence and status. This received widespread media coverage and was portrayed as an astonishing position for a woman to adopt, with the clear implication that it was antifeminist. But is her concern valid?

Few countries—notably Sweden, Denmark, Finland, Norway, Iceland, the Netherlands, and Germany—have made substantial progress towards sexual equality and women's empowerment, and the United Kingdom is not one of them.[1] In this regrettable situation it seems highly likely that Carol Black is right and that a profession that becomes feminised risks the loss of status and influence.

Women working full time in Great Britain in April 2003 earned only 82% of the average full time earnings of men, and this gender pay gap in hourly earnings of 18% has remained virtually unchanged since the mid-1990s.[2] Domestic and family responsibilities continue to fall disproportionately on women. Only 52% of mothers of children under 5 years old are in employment compared with 91% of fathers. Many women are obliged to work part time, and the average hourly earnings of women working part time are 40% lower than those of men working full time. A substantial gender pay gap exists at every level of educational qualification: average hourly earnings increase in proportion to achievement so that both men and women with a degree have double the hourly earnings of those with no qualifications, but in 2002 the gender gap in pay was 19.3% for graduates and 20% for those with no qualifications. In 2003, the average hourly earnings for women doctors was £24.33 compared with £30.70 for men.[3] Men make up the majority of employees in the five highest paid occupations, and women predominate in four of the five lowest paid.[4] Is this the portrait of a society that values men and women equally?

The performance of young people in national examinations has finally laid to rest the notion that women are less intellectually able than men, with girls now clearly outperforming boys at both GCSE and A levels.[5] More women than men are studying for university degrees.[6] Yet we are still seeing a tacit classification of occupations as being more suitable for either men or women, which results in sexual segregation in employment at all levels of educational achievement. Even in professions that seem to offer equal access, the segregation continues within different parts of the profession. Women-dominated occupations and subsections of professions continue to be those with lower standing in terms of career opportunities, income, and prestige. Clearly Britain is not yet a society that accords equal status to men and women. However, if women are competent doctors and patients receive high standards of care, how much does a loss of professional status matter?

The key is the relation between status and political independence. Contemporary Western societies are dominated by the twin forces of the state and the market. Organisations and groupings that operate independently of these two make up a third sector—civil society—defined as the arena of uncoerced collective action around shared interests, purposes, and values.[7] Professional groups are important constituents of this third sector. The professions of education, religion, law, and medicine are in daily contact with citizens and see at first hand how, how often, and to what extent society goes wrong. Such contact carries a responsibility for advocacy and for interceding with the powerful on the part of the relatively powerless.[8] When the status or independence of these professions is eroded, as happens within totalitarian regimes and increasingly in technocratic and market driven societies, important elements of civil power and societal justice are suppressed. The worry is that the enduringly unequal status of women means that the feminisation of professions may further diminish the independence, power, and influence of civil society at a time when it is already under threat. To argue this is not to be antifeminist but to indict our society.

The solution must be a situation in which fewer assumptions are made about which occupations are suitable for which sex and all occupations seek to mirror the demography of society, recruiting men and women proportionately from the whole population and affording them genuine choice and equality of

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opportunity. First and foremost, this requires the provision in the United Kingdom of levels of state support for the care of children and other dependents that are routinely available in the seven countries that have made genuine progress towards women's empowerment. It also requires women to continue to summon the determination to break down gender barriers both within and between occupations[9]; and men to have the courage not to respond, as they have tended to do historically, by turning away from occupations as they become predominantly female.

Only when Britain's gender pay gap has disappeared and sexual segregation of occupation has been minimised, when women no longer have to choose between personal commitments and professional power,[10] will status and gender finally become disconnected. Whether this process will be helped or hindered by Carol Black's statement, however valid, remains an open question.

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Reporting systems for cardiac surgery

Existing systems assure safety but do not indicate quality

Papers pp 421, 424, and *Education and debate* p 450

The outcomes of medical treatment arouse political and public interest around the world. In the United States the departments of health in New York, New Jersey, and Pennsylvania publish cardiac surgical results that are specific to surgeons and hospitals. The New York initiative, which broke new ground, provides robust risk stratified data, and identifies surgeons and hospitals with better or worse outcomes than the state average.[1] However, it lumps all coronary artery bypass graft operations together, uses only mortality as an outcome measure, and takes three years to produce by which time the results are not of much use to patients to make a choice.

Is mortality a good indicator of outcome? Mortality is defined by the Society of Cardiothoracic Surgeons in the United Kingdom as death in the hospital where surgery is done, during the same admission.[2] This excludes deaths in patients who have been discharged to peripheral hospitals or rehabilitation facilities. The definition of mortality could be improved to include these deaths as is done in New York, but systems in the United Kingdom are unable to capture these deaths consistently. Mortality after coronary artery bypass graft surgery is low (1-3%), and is therefore a poor measure for differentiating between surgeons. Advances in anaesthetics and intensive care can prevent mortality even when the operation has been imprecise. Postoperative morbidity, however, cannot be prevented and is a better indicator of quality.

Coronary artery bypass graft surgery is not a homogeneous operation. Most patients require three bypass grafts, and the standard operation is done with a single internal mammary artery and two vein grafts by using cardiopulmonary bypass. Depending on the experience and preference of the surgeon the operation may be done with or without using cardiopulmonary bypass, and one, two, or more arterial conduits may be used. The off-pump approach has been shown to decrease morbidity.[3 4] The use of arterial conduits is associated with a decreased incidence of long term cardiac events.[5 6] Reliable figures for the number of operations done off-pump in the United Kingdom are not available. Despite evidence supporting the use of arterial conduits, fewer than 20% of patients receive two or more arterial grafts in the United Kingdom.[2] The use of these techniques, however, increases the complexity of the operation, reduces the margin for error, and can increase morbidity in inexperienced hands.

In this issue Bridgewater et al report on the practice of newly appointed surgeons in the first four years of independent practice.[7] They find that mortality in patients operated by this group of surgeons is not higher than that in those operated on by their more experienced colleagues. Moreover, in the first four years of practice, mortality outcomes adjusted for risk improved. "Practice makes perfect" is easy to understand and could explain the improvement of performance over the first four years. However, this would also mean that more experienced surgeons should have better results.

What might explain this discrepancy? Possibly mortality figures will not improve beyond a certain limit, and that limit is reached by year four. The system used by Bridgewater, EuroSCORE, has limitations, and referring doctors could be diverting high risk patients to more experienced surgeons. Moreover, experienced surgeons are more likely to train junior surgeons, this could possibly have an impact on results. Like most of the reports in the non-specialist literature, this paper does not take into account the variations in coronary artery bypass graft operations (off-pump or on-pump, number of arterial conduits used) and uses only

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